

What is claimed is:

1. A pseudo I/O device for use in a pseudo I/O system that is connected to a device to be tested, and  
5 simulates an actual I/O system, comprising:

a setting unit receiving a file where contents of an error of a pseudo target are defined and set, and setting the file as a setting file;

10 a receiving unit receiving a command from the device to be tested;

a pseudo I/O unit processing the command received by said receiving unit according to set contents if the contents corresponding to the command are set when referencing the setting file, and performing a normal reply process if the contents corresponding to the  
15 command are not set; and

a transmitting unit returning data after being processed to the device to be tested at a request source.

20 2. The pseudo I/O device according to claim 1, wherein a file where information of an I/O device to be simulated is defined and set is set as the setting file.

25 3. The pseudo I/O device according to claim 2,

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further comprising

5 a processing unit deleting predetermined set contents or restoring the set contents to normal set contents after performing a process according to the set contents if the predetermined contents are set when referencing the setting file, and automatically performing a normal reply process at a next time.

10 4. The pseudo I/O device according to claim 1, further comprising

a hardware error generating unit making a hardware error occur in hardware if error contents of the hardware are set in the setting file.

15 5. The pseudo I/O device according to claim 1, further comprising

20 a protocol error generating unit making a set error of a protocol occur in a portion processing the protocol, if contents of the error of the protocol are set in the setting file.

6. The pseudo I/O device according to claim 4, further comprising

25 an error occurrence timing specifying unit specifying timing at which a hardware error is made to

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occur, or timing at which a protocol error is made to occur, while processing the command received from the device to be tested.

5           7.     The pseudo I/O device according to claim 5 ,  
further comprising

10               an error occurrence timing specifying unit  
specifying timing at which a hardware error is made to  
occur, or timing at which a protocol error is made to  
occur, while processing the command received from the  
device to be tested.

8.     The pseudo I/O device according to claim 6,  
wherein

15           as the timing at which a hardware or a protocol  
error is made to occur, timing at which an address to  
be processed by the device to be tested and an address  
set in the setting file match, or timing at which the  
address to be processed and an error address stored when  
20   an error occurs match is specified.

9.     The pseudo I/O device according to claim 6,  
wherein

25           as the timing at which a hardware or a protocol  
error is made to occur, any of the moment when error

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contents are set in the setting file, timing at which data is received, timing at which transfer data becomes a specified data transfer size during data transfer, and timing at which a status signal is transmitted is specified.

10. The pseudo I/O device according to claim 4, wherein

as the hardware error or the protocol error, any of a delay in a transmission start time of frame contents, a phenomenon that part or a whole of frame contents are not transmitted, a change in frame contents, a change in data transfer information, a change in a data transfer method, and a change in a link state is used.

11. The pseudo I/O device according to claim 5, wherein

as the hardware error or the protocol error, any of a delay in a transmission start time of frame contents, a phenomenon that part or a whole of frame contents are not transmitted, a change in frame contents, a change in data transfer information, a change in a data transfer method, and a change in a link state is used.

12. The pseudo I/O device according to claim 6,

wherein

as the hardware error or the protocol error, any of a delay in a transmission start time of frame contents, a phenomenon that part or a whole of frame contents are not transmitted, a change in frame contents, a change in data transfer information, a change in a data transfer method, and a change in a link state is used.

13. A pseudo I/O method simulating an actual I/O device by making a connection to a device to be tested, comprising:

receiving a file where error contents of a simulation target are defined and set, and setting the file as a setting file;

receiving a command from the device to be tested; performing a pseudo I/O process in which the received command is processed according to set contents if contents corresponding to the command are set when referencing the setting file, and a normal reply process is performed if the contents corresponding to the command are not set; and

returning the data after being processed to the device to be tested at a request source.

14. The pseudo I/O device according to claim 1,

wherein the pseudo I/O device used to test operations of a test device of various types of devices, an analyzer, a driver of an actual device, a driver installed on an OS, a RAID controller controlling a RAID device, etc.

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15. The pseudo I/O method according to claim 13, wherein the pseudo I/O method used to test operations of a test device of various types of devices, an analyzer, a driver of an actual device, a driver installed on an OS, a RAID controller controlling a RAID device, etc.

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